ESO 2099

1994 AGRICULTURAL OUTLOOK

GRAINS AND OILSEEDS

LIVESTOCK

A Discussion Guide for County Agents

To Accompany
1994 Agricultural Policy and Outlook
ESO 2098

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SLIDE 4: WORLD GRAIN AND OILSEED: PRODUCTION AND USE

A. Markets for U.S. grains and oilseeds are global

1. In the last 10 years, exports have accounted for:

   a. 53% of all wheat utilization

   b. 38% of all soybean disappearance

   c. 23% of all corn use

   d. 4 of every 10 acres harvested

   e. 40 cents of every dollar of farm income earned from grains and oilseeds came from export sales

B. Over time, annual worldwide production and use are closely matched

C. Production exceeded use 7 of the last 10 years

1. Stocks accumulate

2. Prices depreciate

   a. prices in 1986/87 averaged 37% **below** 1988/89, a period when supply equaled demand

D. Use exceeded production in '87 and '88

1. Production declines reflect:

   a. acreage reduction

      1) domestic farm programs
      2) foreign acreage

   b. drought-reduced yields

2. Global stocks were drawn down

   a. "seller demand" for inventories, bid up market prices

E. Production exceeded use in '89 and '90

1. stocks increased

2. prices deteriorated

F. Use expected to exceed use in 1993/94

1. Growing population assures increased use so long as supply is available

2. Improved diets (more meat) in developing economies

3. Prices in 1993/94 will likely average 20-30% above last year.

G. Comparing trends in U.S. production with the rest of the world:

1. The U.S. accounted for virtually all of the declines in production

2. Since 1983:

   a. non-U.S. production has trended **upward**

      --80% in 1983-85
      --81% in 1991-93
      --until the last 3 years all of increased production came outside U.S.

   b. U.S. production has been steady

      --20% in 1983-85
      --19% in 1991-93

3. This increasing global competitiveness helps explain the U.S. stake in bringing about international harmonization of farm policies.

   a. reduction in production subsidies in other countries

   b. spreading the production adjustment process to other countries

SLIDE 5: WORLD TOTAL GRAINS

A. Global production continues to grow

1. Increased foreign production, up 30% during last decade

2. Steady to lower U.S. production, down 3% during last decade

B. U.S. losing preeminent position

C. 1993/94 use will exceed production by 57 mmt.

1. Stock/use ratio will fall to a low 17%.

SLIDE 6: WORLD COARSE GRAINS

A. World area is at a 30-year low.

B. Non-U.S. area declining, after increasing steadily until 1980, but about equal to area 30 years ago.

C. U.S. area declining since 1985.

SLIDE 7: U.S. TOTAL GRAINS

A. 1993/94 use will exceed production by 36 mmt.

B. Stocks/use ratio falls to a low 16%, lower than after '88 drought because of huge stocks prior to drought of '88.

SLIDE 8: CORN: SUPPLY AND USE (October Report)

	1992/93	% change	projected 1993/94	% change
planted acreage (mil)	79.3	+4	73.7	-7
harvested ac. (mil)	72.1	+5	63.1	-12
yield (bu/ac)	131.4	+21	103.1	-22
production (mil bu)	9,479	+27	6,503	-31
carry-in (mil bu)	1,100	-28	2,113	+92
total supply (mil bu)	10,586	+17	8,636	-18
feed use (mil bu)	5,299	+9	4,850	- 8
total domestic use (mil bu)	6,810	+8	6,400	-6
exports (mil bu)	1,663	+5	1,350	-19
total use (mil bu)	8,474	+7	7,750	-9
carry-out (mil bu)	2,113	+92	886	-58

A. 1992/93 comments:

1. Production was down 27% because of higher yield and increased acreage

--average yields were 10 bu. above trend line

2. Total supplies were up 17% because of the higher production

3. Exports were up 5%

   --due mostly to minor buyers, not our traditonal big corn buyers

4. Upward adjustment in use was largely the result of increased domestic feeding

   a. feeding increased about 320 mil. bu., setting a record 5.30 bil. bu.

   b. exports increased, but not enough to recover losses of the two previous years.

5. Carry-out stocks increased 92% to about 25% of annual use, a burdensome number.

B. 1993/94 comments:

1. Total supplies are much lower than last year

   --sharp decrease (-31%) in production more than offset sharp increase (+92%) in carry-in

2. Significant reduction in feed use is expected

   a. feeding margins are expected to deteriorate

   b. beef, swine, and poultry numbers increasing, but higher feed prices will result in liquidation before mid-year.

3. Export prospects are most uncertain at this point

   a. FSU largely absent from market

   b. negative:

      --economic and political chaos
      --inadequate funds for purchase
      --continuing foreign recession

   c. positive:

      --not to be found

   d. export shipments have started 1993/94 at a slow pace

      --trailing a year earlier by 16% through first four months of the marketing year

--sustained increase doubtful this year; expect 15-20% decline for the year
--China continues to export corn (12 million metric tons), cutting into our corn exports

4. Carry-out next August 31 is expected to be down 58% from a year earlier

   a. estimated at around 11% of annual use; a very low level

   b. market is very tight; carryout could grow as domestic feeding declines further

SLIDE 9: U.S. CORN: ENDING STOCKS/TOTAL USE

1. Significant reduction from last year
2. Nearly as low as after the '73 disaster
3. Lower than after '83 or '88 drought
4. Serious!!

SLIDE 10: U.S. CORN EXPORTS

1. Continuing 4-year decline
2. Lowest since 1985
3. Future looks dim

   a. Lackluster foreign demand

   b. Growing foreign production of feed grains that compete with corn

SLIDE 11: FOOD, SEED AND INDUSTRIAL USE

1. Continued growth - sow 20% of production
2. 1/3 of use is for alcohol
3. 2/3 of use is for sweeteners and starch
4. Clean Air Act is positive force here

SLIDE 12: CORN: STOCKS-PRICE RELATIONSHIP

A. Graph shows the historic relationship between year-end carry-out stocks and the season average price as a percent of the price support loan rate

B. 1992/93 Ohio price averaged $2.09

1. This was 122% of the national average loan rate of $1.72

2. Above comparable historic levels, but part of documenting a new curve.

   --prices had to be high enough to ensure an adequate supply from storage until the 1992 crop was made
   --loan rate was the next to lowest in 15 years

C. A new relationship seems to be evident as we look at 1988-1992 data.

D. For 1993/94:

1. With carry-out stocks projected to be in the .8 bil. bu. range, the season average price looks to be in the range of 150-170% of loan

2. With the loan rate = $1.72, this projects to an average price in the $2.60-2.90 range

SLIDE 13: CORN PRICES IN NORMAL AND SHORT YEARS

A. Short crop years demonstrate the typical "long tail" pattern

B. 1993 is a short crop year

C. Expect prices to peak during winter months and then soften into spring and summer, with weather-related prices next spring and summer.

SLIDE 14: 1993 CORN PROGRAM

A. This graph charts the returns above variable costs for a fairly typical Ohio corn grower participating in the 1994 ARP-Flex program, compared with returns without participation

B. The "break-even" price is about $2.65 (with 5% ARP)

   --this compares to a preliminary expectation for an average 1993/94 price centering around $2.25

C. The flex acres are planted to corn for calculation purposes. Some acres will go to beans; the market, however, will likely equalize returns from corn and beans.

D. The ARP has been decreased to ZERO. This will likely increase participation in next year's corn program. Participation should approach 100%. The program is costless and it provides price insurance on 85% of acreage.

SLIDE 15: WORLD SOYBEANS

1. Use will exceed production by 3 mmt.
2. Stock/Use Ratios will decline to 15% but not to a troublesome level.

SLICE 16: U.S. SOYBEANS

1. Use will exceed production by 200 million bushels
2. Stock/Use Ratio expected to drop by 9% - the lowest since the '83 drought.
3. Tight domestic situation.

SLIDE 17: SOYBEANS: SUPPLY AND USE

	1992/93	% change	projected 1992/93	% change
planted acreage (mil)	59.3	0	59.5	0
harvested ac. (mil)	58.2	0	56.0	-4
yield (bu/ac)	37.6	+10	32.7	-13
production (mil bu)	2,188	+10	1,834	-16
carry-in (mil bu)	278	-15	292	+5
total supply (mil bu)	2,468	+6	2,131	-14
domestic crush (mil bu)	1,279	+2	1,230	-4
total domestic use (mil bu)	1,406	+4	1,341	-5
exports (mil bu)	770	+12	625	-19
total use (mil bu)	2,176	+ 7	1,966	-10
carry-out (mil bu)	292	+ 5	165	-43

A. 1992/93 comments:

1. Total supply increased, up 6%

   a. crop was big, yields up 10%, acreage unchanged

      --U.S. accounted for only about 51% of world production, down from 60-65% in late 1970s/early 1980s, and 75% of 30 years ago

   b. carry-in was down 15% from the year earlier and down 52% from its '86 level

2. Use increased 4%

   a. largely from higher exports

   b. exports increased 12%

      --most of increases were to countries in the EC

3. Domestic crush up 2%

   a. soymeal exports down 10%; soyoil exports down 44%

   b. domestic feeding rates increased 5%

4. Carry-out stocks decreased by 5%, to 13% of annual use

   --about equal to long-term average, 15%

B. 1993/94 comments:

1. Acreage -- no change

   --still down 12 million acres from '79 peak

2. Production down 16% because of reduced harvested acres and lower yield

   --yet, U.S. share of world slipped to 45%

   --South American production up 6% to 32% of world production

3. Total supplies down 14%, due to lower production

   --reduced use will not keep prices from rising
   --have regained use lost due to '88's short supply and high price

4. Domestic crush will be off 50 million bushel

    a. soymeal feeding will be steady

    b. soymeal exports will be down as East Europe and FSU feed fewer livestock

5. Strong domestic demand for soyoil will continue

6. The 10% decrease in disappearance will not offset higher carry-in and lower production; carry-out stocks will be much lower.

    --8% of annual use
    --the market is very tight and will respond rapidly to new demand, short South American crops, or U.S. weather problems

SLIDE 18: SOYBEANS: STOCKS-PRICE RELATIONSHIP

A. 1992/93 prices averaged $5.79 in Ohio

    --115% of the $5.02 national average loan rate
    --about in line with historic price behavior when supplies are around 113% of use

B. With 1993/94 total supplies around 107% of expected use, we are in uncharted territory.

C. With the 1993 national average loan = $5.02, the graph suggests an average price well above $7 but the USDA estimates price in $6-$7 range.

SLIDE 19: 1993/94 SOYBEAN PRICE PROSPECTS

A. Soymeal prices are projected to be in the $190-210/ton range

1. Over the past 15 years, soy meal:corn price ratio has averaged about 2:1 (price per pound)

2. In recent years, the ratio has trended irregularly upward

    --averaged 2.3 over the past 4 years.

3. Projections are based on corn price expectations in the $2.50-2.70 range and the meal:corn price ratio in the 2.1:1 to 2.2:1 range

B. Soyoil prices through next summer are trading in roughly the 24-26 cent/pound range

1. Soyoil prices appear to move around the 20-22 cent level unless carry-out stocks fall below roughly 1-1.2 bil. pounds

2. Next year's carry-out is estimated at 1.0 billion pounds

C. Deducting a 50-60 cent crush margin from the projected product values yields a whole bean value in the $6.50-7.00 range, much lower than indicated by the stocks:loan ratio, above

SLIDE 20: FOREIGN WHEAT

A. Foreign consumption continues to exceed production

B. World still needs our wheat

SLIDE 21: WHEAT STOCKS-TO-USE RATIOS

A. U.S. levels are below long-run normal

B. World levels have been increasing steadily since '89 as U.S. has declined.

C. Major competitors have increased rapidly since 1989. Competitors have taken on the role of holding the world reserves.

SLIDE 22: WHEAT TRADE

A. U.S. share of wheat trade trending downward

B. Amount of wheat traded in the world slight trend up, especially since '85

C. Foreign production has filled the gap and will likely continue in the future

SLIDE 23: WHEAT: SUPPLY AND USE

	1992/93	% change	projected 1993/94	% change
planted acreage (mil)	72.3	+ 3	72.1	0
harvested ac. (mil)	62.4	+ 8	63.0	+1
yield (bu/ac)	39.4	+15	38.4	- 3
production (mil bu)	2,459	+24	2,442	- 1
carry-in (mil bu)	472	-45	529	+12
total supply (mil bu)	3,001	+ 4	3,036	+1
domestic food (mil bu)	829	+ 6	825	0
total domestic use (mil bu)	1,118	- 1	1,219	+9
exports (mil bu)	1,354	+ 6	1,175	-13
total use (mil bu)	2,472	+ 2	2,394	- 3
carry-out (mil bu)	529	+12	642	+21

A. 1992/93 comments:

1. Total supplies, up 4% but remained historically low.

2. Production was up 24%, but the lingering effect of the '88 drought and recent set-aside programs kept carry-in low

3. Domestic use was down 1% because of reduced feed use, but exports increased by 6%; total use was up by 1%

4. Carry-out increased, but remained near last year's 18-year low.

B. 1993/93 comments:

1. Reduced production did not offset the higher carry-over

   a. a 1% increase in harvested acreage

   b. lower yield, 38.4 bu./acre, down 3%

   c. a 1% decline in total production

2. Total use will be down

   a. domestic feed use will be up 50%

   b. exports down 13%

      --increased exports could trigger price rise

3. Carry-out up 21%

   --has not kept the lid on prices

SLIDE 24: WHEAT: STOCKS-PRICE RELATIONSHIP

A. 1992/93 Ohio prices averaged $3.17

   --143% of the national average loan rate of $2.21

B. With year-ending stocks increasing toward 650 mil. bu., this season average price looks to be roughly 1.3 times the national average $2.45 loan rate; $3.10-3.30, below what the graph would suggest.

SLIDE 26: U.S. MEAT, POULTRY AND FISH CONSUMPTION

A. The trend in beef consumption has been down since 1986.

   1. 1986: 74.4 pounds/person.
   2. 1993: 62.2 pounds/person.
   3. Note that all of the drop occurred after 1986.
   4. 1986-1993: -16%.

B. Pork consumption bottomed in 1986 and peaked in 1992

   1. 1986: 45.2 pounds/person.
   2. 1992: 49.5 pounds/person.
   3. 1986-1993: +10%.

C. Poultry consumption has grown substantially since 1985.

   1. 1985: 45.2 pounds/person.
   2. 1993: 61.6 pounds/person.
   3. 1985-1993: +36%.
   4. Poultry consumption will equal beef consumption for the first time in U.S. history in 1994.

D. Consumption changes reflect changes in both consumer preference and relative prices. How much of each is a key concern.

SLIDE 27: RETAIL MEAT PRICES

A. Beef continues to increase.

B. Pork is declining.

C. Poultry relatively steady.

D. Growing gap, particularly between beef and poultry.

E. Consumer shifting to less expensive meat.

SLIDE 28: U.S. MEAT EXPORTS

A. Beef exports have grown enormously since 1982.

1. 1985: 328 million pounds.
2. 1993: 1300 million pounds.
3. 1985-1993: +296%
4. 1993: -2%
5. In 1993, exports represented 6% of U.S. commercial beef production.
6. Major buyers: 1992
   a. No. 1: Japan, 46% of U.S. exports.
   b. No. 2: Canada, 19%.
   c. No. 3: Mexico, 15%

B. Beef imports in 1993: 2410 million pounds.

C. Pork exports have been up since 1985.

1. 1985: 128 million pounds.
2. 1993: 410 million pounds.
3. 1985-1993: +320%
4. 1993: +1%
5. In 1993, exports represented 2.4% of U.S. commercial pork production.
6. Major buyers: 1992
   a. No. 1: Japan, 53% of U.S. exports.
   b. No. 2: Mexico, 33%.

D. Pork imports in 1993: 670 million pounds.

E. Chicken exports have grown substantially since 1980.

1. 1985: 438 million pounds.
2. 1993: 1825 million pounds.

3. 1985-1993: +417%.

4. 1993: +19%.

5. In 19932, exports represented 8.1% of U.S. commercial chicken production.

6. Major buyers: 1992

   a. No. 1: Hong Kong, 22% of U.S. exports.

   b. No. 2: Japan, 18%

F. No chicken was imported into the U.S. in 1993.

G. Turkey exports have increased since 1985.

1. 1985: 27 million pounds.

2. 1993: 200 million pounds.

3. 1985-1992: +741%.

4. 1993: +14%.

5. In 1993, exports represented 4% of U.S. commercial turkey production.

H. No turkey was imported into the U.S. in 1993.

SLIDE 29: U.S. INVENTORY OF ALL CATTLE AND CALVES, JANUARY 1

A. Long-term decline in cattle numbers has been dramatic.

1. 1975: 132 million head.

2. 1993: 101 million head.

B. January 1, 1994 survey is expected to show an inventory of 103 million head, up 1%.

C. Modest growth rate is surprising given the positive returns cow-calf producers have earned for the last six years.

D. Three factors may explain the recent conservatism of the cattle industry.

1. Uncertainty regarding the demand for beef.
2. Cow-calf producers' memory of large losses experienced in the early and mid-1980s.
3. The Tax Reform Act of 1986 reduced the incentives to expand through the elimination of the investment tax credit and the capital gains exclusion.

E. Conservatism is ending.
   1. January 1, 1995 survey expected to find 104 million head.
   2. Further increases at least through '96; 105 million head, up 3% from '93.

SLIDE 30: COMMERCIAL BEEF PRODUCTION

A. Beef production is expected to be up every quarter of 1994.

B. Production could be up 3% in 1994 as increased cattle on feed begin coming to market.

SLIDE 31: DEMAND FOR BEEF IN THE U.S.

A. A significant change in the demand for beef apparently occurred in 1987.
   1. Health concerns of consumers.
   2. Declining relative prices for chicken and turkey.

B. The change in demand reflects both a downward shift and a change in slope.
   1. 1980-1986: inelastic demand, which implies decreasing revenue as production increases.
   2. 1987-1993: elastic demand, which implies increasing revenue as production increases. Income and supply number confirm this.

SLIDE 32: FED CATTLE PRICE, OMAHA

A. In 1991 prices declined sharply between April and August.

B. Prices recovered in 1992 without sharp decline in second half.

C. First quarter peak in 1993 surprised best analysts.

SLIDE 33: FORECASTS

1. 1993IV: $72-74/cwt.
2. 1994I: $74-77/cwt.
3. 1994II: $76-79/cwt.

SLIDE 34: COMMERCIAL PORK PRODUCTION

A. Producers responded to lower profit, 1993 production down 2%.

B. Lower prices have slowed production increase.

C. 1994 production expected to go down for 1st half and up the 2nd half each quarter from 1992.

SLIDE 35: DEMAND FOR PORK IN THE U.S.

A. Demand for pork appears to have been stable since 1984, except:

1993 fell off the line. Does this mean demand is shifting? We won't know until two or three years from now.

SLIDE 36: BARROW AND GILT PRICE, 7 MARKET AVERAGE

A. Hog prices decreased rapidly from mid-1990 to beginning 1992.

B. Prices increased 1st half of 1992, and declined 2nd half.

C. Steady increase during 1993 but not to levels of 3 years ago.

SLIDE 37: ESTIMATED FARROW-TO-FINISH RETURNS

A. Hog price cycle very evident.

B. '93 was period of modest but not great profit.

SLIDE 38: FORECASTS

A. Forecasts based on inventory and pig-crops reported in September.

1. Production up 1% next year.
2. Production expected to expand 2nd half

B. Increased production will depress prices.

1. Annual price $1-2 lower next year.

SLIDE 39: GROWTH OF BROILER PRODUCTION IN THE U.S.

A. Since the first quarter of 1990, broiler production has grown at an average rate of 6 percent per quarter.

B. There has been considerable variation in the growth rate.

1. Increased growth rate in 1989 due to decreasing feed costs.
2. Growth rate slowed in 1992 and 1993 as feed price rose and profits moderated.

SLIDE 40: GROWTH OF TURKEY PRODUCTION IN THE U.S.

A. Since the first quarter of 1990, turkey production has grown at an average rate of 4.5 percent per quarter.

B. There has been considerable variation in the growth rate.

1. Decline in 1990 caused by higher feed price.
2. 5% or less growth for 3 years.
3. Growth rate slowed in 1991 - 1993 as profits moderated; 3.5% in 1992; 1% in 1993.

SLIDE 41: U.S. SUPPLY FACTORS

A. Two factors determine total supply: Cows numbers and milk production per cow.

B. Number of cows.

1. In 1991 broke ground for the first time with less than 10 million cows.
2. Decline in cow numbers have generally averaged about one percent per year.
3. Decline in cow numbers in 1993 averaged 1.5 percent, slightly higher than average.
4. A similar size decline is expected for 1994.
5. In general, above average declines would reduce supply of milk.

C. Milk production per cow.

1. However, milk production per cow has increased more than expected.
2. Per cow milk production increases generally average between 300 and 400 pounds per year.
3. Projections are for an average of 15,639 pounds of milk per cow in 1993, up 1.4 percent or 216 pounds from last year. This milk increase is lower than expected.
4. Looking for average to above average increase during 1994.

SLIDE 42: U.S. PRODUCTION AND DEMAND

A. Total milk production. Total milk production expected to average 152 billion pounds in 1993, lower than expected because of low per cow production increases and the more rapid decline in cow numbers.

B. Commercial use

1. Commercial use increased in 1993
2. CCC purchases declined because of slow growth in production
3. 1994 CCC purchases are expected to be about the same as for 1993.

SLIDE 43: MINNESOTA AND WISCONSIN PRICE SERIES

A. Prices for 1993

1. During 1993, the M-W price rose throughout the first quarter, declined to mid-year, and rose again during the third quarter.

B. Projections for 1993 and 1994

1. All milk price for the U.S. will average about $12.80 per cwt. during 1993, down $.30 from the $13.10 average during 1992.
2. Producer prices began to decline this fall, as they did a year earlier.
3. Expect milk prices to rise and fall seasonally between $11 and $13 during 1994, with price averaging about the same as last year, $12.80.
4. Note the above projections are tentative. Much depends on the economy and milk production. Experiences during the late 1980s and early 1990s suggest that prices will remain volatile.

C. Support levels.

1. Note that support prices have remained constant.
2. Likely to remain constant until 1995.

SLIDE 44: 1993-93 SUPPLIES AND PRICES

Milk prices up marginally

Beef prices down 2%

Hog prices may be up 1%

Corn prices up strong - 26%

Bean prices up strong - 17%